

CLAIMS

What is claimed is:

1. A method of QoS provisioning a non-QoS capable home LAN device on a home network having a gateway, comprising:
requesting the QoS needs of the non-QoS capable home LAN device;
provisioning the QoS needs of the non-QoS capable device into the gateway utilizing a reservation protocol; and
transmitting the data communications between the home LAN devices on the home network based on the QoS needs of all the devices on the home network.
2. The method of claim 1, wherein provisioning the QoS needs of the non-QoS capable device comprises initiating a reservation with the gateway on behalf of the non-QoS capable device.
3. The method of claim 1, wherein transmitting the data communications comprises:
prioritizing the data communications traffic between a plurality of home LAN devices on the home network based on the QoS needs of all the QoS capable and non-QoS capable devices on the home network; and
adjusting the QoS parameters of the QoS capable home LAN devices based on the traffic priorities established.
4. The method of claim 1, wherein the requesting the QoS needs of a non-QoS capable home LAN device comprises:
running an HTTP protocol on a web browser associated with the gateway to manually poll a user for the one or more QoS parameters of the non-QoS capable home LAN device on the home network; and
receiving and storing the one or more QoS parameters in the gateway.

5. The method of claim 1, wherein the provisioning the QoS needs of the non-QoS capable home LAN device into the gateway comprises transmitting the QoS needs to a subnet bandwidth manager associated with the home network using the reservation protocol.

6. The method of claim 1, wherein the provisioning the QoS needs of the device into the gateway utilizing the reservation protocol comprises employing a manual reservation operation.

7. The method of claim 1, wherein the provisioning the QoS needs of the device into the gateway utilizing the reservation protocol comprises employing an automatic reservation detection operation.

8. The method of claim 1, further comprising regulating traffic on the home LAN for each home LAN device associated therewith based on a prioritization of a QoS parameter provisioned by the non-QoS capable home LAN device on the home network.

9. The method of claim 1, wherein the requesting of the QoS needs of the non-QoS capable home LAN device is performed using a portal service proxy interface.

10. A method of QoS provisioning a non-QoS capable home LAN device on a home network, comprising:

monitoring communication traffic from the non-QoS capable home LAN device on the home network;

determining the QoS needs of the non-QoS capable home LAN device based on the traffic of the non-QoS device;

provisioning the QoS needs of the device utilizing a reservation protocol;
and

transmitting the data communications between the home LAN devices on the home network based on the QoS needs of all the devices on the home network.

11. The method of claim 10, wherein provisioning the QoS needs of the non-QoS capable device comprises initiating the reservation with the gateway on behalf of the non-QoS capable device.

12. The method of claim 10, wherein transmitting the data communications comprises:

prioritizing the data communications traffic between a plurality of home LAN devices on the home network based on the QoS needs of all the QoS capable and non-QoS capable devices on the home network; and

adjusting the QoS parameters of the QoS capable home LAN devices based on the traffic priorities established;

13. The method of claim 10, further comprising:
establishing a connection between the devices on the home LAN; and
managing an exchange of information between the devices based on the QoS needs of the non-QoS capable device on the network.

14. The method of claim 10, wherein the monitoring the traffic from the non-QoS capable home LAN device on the network comprises:

monitoring the data communications from the non-QoS capable device to determine one of a minimum bandwidth, maximum bandwidth, delay, and a QoS parameter or requirement of the device on the home network; and

storing the QoS parameter associated with the device in a location accessible to the home network.

15. The method of claim 10, wherein provisioning the QoS needs of the device utilizing the reservation protocol comprises employing a subnet bandwidth manager associated with home network.

16. The method of claim 10, wherein provisioning the QoS needs of the device utilizing the reservation protocol comprises employing a manual reservation operation associated with a proxy interface on the home network.

17. The method of claim 10, wherein provisioning the QoS needs of the device utilizing the reservation protocol comprises employing an automatic reservation detection interface associated with the home network.

18. The method of claim 10, further comprising regulating traffic on the home LAN for each home LAN device based on a prioritization of a QoS parameter provisioned by the non-QoS capable home LAN device on the home network.

19. A method of QoS provisioning a non-CH compatible home LAN device on a home network using a gateway having a portal service proxy interface, the method comprising:

- requesting the QoS needs of a non-CH compatible home LAN device from a client using the portal service proxy interface;

- provisioning the QoS needs of the device into the gateway utilizing a reservation protocol;

- prioritizing the data communications traffic between a plurality of home LAN devices on the home network based on the QoS needs of the CH capable and non-CH compatible devices on the home network;

- adjusting the QoS parameters of all the CH capable home LAN devices based on the established traffic priorities; and

- transmitting the data communications between the home LAN devices on the home network based on the QoS needs of the devices on the home network.

20. The method of claim 19, wherein provisioning the QoS needs of the device into the gateway comprises initiating the reservation from the gateway on behalf of the non-CH compatible device to the other home LAN devices on the home network.

21. The method of claim 19, wherein requesting the QoS needs of a non-CH compatible home LAN device from a client using the portal service proxy interface comprises:

running an HTTP protocol on a web browser to manually poll the client for the one or more QoS parameters of the non-CH compatible home LAN device on the home network; and

receiving and storing the one or more QoS parameters in the gateway.

22. The method of claim 19, wherein the provisioning into the gateway the QoS needs of the device utilizing the reservation protocol comprises employing a subnet bandwidth manager associated with the home network.

23. The method of claim 19, wherein provisioning the QoS needs of the device into the gateway utilizing the reservation protocol comprises employing a manual reservation operation.

24. The method of claim 19, wherein provisioning the QoS needs of the device into the gateway utilizing the reservation protocol comprises employing an automatic reservation detection operation.

25. The method of claim 19, further comprising regulating traffic on the home LAN for each home LAN device based on a prioritization of a QoS parameter provisioned of the non-CH compatible home LAN device on the home network.